

powder was given eight more powders were administered in the same way, and fourteen days later the dosage was again repeated. In several cases in which the results were not so satisfactory as desired, a fourth administration was made after a pause of eight to fourteen days, or after an interval was repeated once, twice, or thrice.

The dose of naphthalin varies from 2½ grains for a child one and a half years old to 6 grains for one of twelve to thirteen years, usually given in powder mixed with sugar or in capsules. Care should be taken that the drug be not given immediately after the meal, but in the intervals, and that all fatty or oily food be withheld in order to prevent solution and absorption. A purge should be given if the administration of the drug is not followed by a free evacuation of the bowels.

In twenty-six of the forty-six cases treated the results were completely successful, no return of the parasite or the various unpleasant symptoms produced by it being observed after an interval of three or four months. In the remaining cases the symptoms were ameliorated for a time, but returned, and the parasite was not completely routed. The drug was well borne by all the patients. In only one case, a child of three years, was a slight strangury noticed, and this three days after the second course of the powders, but it passed off in a short time. The author, therefore, believes that naphthalin is a safer and more efficient drug against the oxyuris than *santonin* or any of the other commonly used anthelmintics.

It is to be remembered that in order to test the effect of naphthalin the author did not employ in conjunction with it any form of intestinal irrigation, which is certainly an adjuvant of considerable value. Ungar uses for this purpose a solution of liquor *aluminii acetici* in the strength of a table-spoonful to the litre of water, believing that its astringent action aids in killing the parasite, and at the same time allays the irritation of the mucous membranes.

SUBCUTANEOUS INJECTION OF QUININE BIMURIATE IN PERTUSSIS.

Since BINZ, in 1868, first suggested the use of quinine in whooping-cough, this drug has enjoyed more or less of a vogue as a specific in this disease. Subcutaneous administration of the drug has already been tried by Drygin and Jaffé, who used the carbamide, a compound of acid hydrochlorate of quinine with urea, in solutions of two to six parts to ten of water. A much more soluble salt, the bimuriate, was suggested by Holland in his inaugural dissertation (*Ueber die Verwendbarkeit des Chin. bimur. zur subcutanen Injection*, Bonn, 1891), and advantage has been taken of this property recently by LAUBINGER (*Jahrbuch f. Kinderheilkunde*, Bd. xxxix., Heft 2 u. 3, S. 141), who reports twelve cases of whooping-cough treated exclusively by subcutaneous injection of this salt of quinine. Several solutions were employed, representing to the gramme a dose of 5, 3, or 2½ centigrammes. Injections were given as slowly as possible beneath the skin of the back, one or two, very rarely three, daily. In all the cases, except one, a decided decrease in the number of paroxysms was noted from the beginning of the injections. In this one case the number of daily paroxysms increased from twenty to twenty-five, and remained above the initial figure for six days, when a decided fall began and was maintained till cure resulted on the thirty-first day after injections were begun. In

four of the cases, after the first decrease, on the fourth or fifth day an increase occurred, the paroxysms reaching a higher figure than at the beginning of the injections; but this was not long maintained, and was followed by a decided fall within a week. In these four cases, during the period of aggravation in the number of paroxysms, the severity of the kink was not influenced, but in all the other cases decided modification in the severity of the attack as well as decrease in the frequency was observed. In all the cases, however, vomiting became less frequent, appetite increased, and the general condition of the child improved.

As regards the duration of the disease after beginning injections, in only one case was this remarkably short—ten days after beginning of treatment, and about fifteen days after the onset of the convulsive stage in a case of rather moderate severity (eighteen paroxysms on the first day). In the other cases injections were required for twenty days (two), twenty-four days, twenty-eight days, thirty days, thirty-three days, and forty-five days (complicated by bronchitis). In the four remaining cases (those showing increase after the initial fall) the treatment could not be continued for various unessential reasons, and the injections were discontinued on the fifteenth to twenty-second day.

In three cases hypodermic abscesses were produced, but this was attributable to the use of a solution which had become cloudy and manifestly unfitted for use. In two cases spots of dry necrosis of the skin were produced, both in very unruly children, in whom the strongest solution, 0.5 to 1.0, was used. In the other cases no accidents followed any of the numerous injections given.

The author does not recommend this method for all cases of the disease, but believes it to be a most efficient means of administering quinine when it cannot be given in sufficient dose by the mouth; in other words, as Fervers has indicated, in those cases in which the severity of the symptoms demands prompt relief.

A HOUSE-EPIDEMIC OF PURULENT MENINGITIS.

SCHERER (*Jahrbuch f. Kinderheilkunde*, Bd. xxxix., Heft 1, S. 1) gives the histories of three cases of acute purulent leptomeningitis in nurslings of a few days to a few weeks old, occurring within a short period in Schwing's Clinic in Prag. The most significant fact, however, in regard to this petty epidemic was the finding of the colon bacillus in the purulent exudates in all three cases. The fact that the bacterium coli commune is very rarely found in meningitis, and its coincidence in these three cases occurring so closely together in the same environment, lead the author to attribute the two latter cases to indirect infection from the first case, through the mouth or external ear, by means of bathing-water used in a tub in which the first child had been bathed.

REINFECTION IN SCARLET FEVER.

THEODOR HASE, of St. Petersburg (*Jahrbuch f. Kinderheilkunde*, Bd. xxxix., Heft 1, S. 58), has studied a series of 2453 cases of scarlatina with special reference to the occurrence of reinfection. Among the total